

SELECTED EXCERPTS FROM STATE HISTORIC PRESERVATION OFFICE PLANNING DOCUMENTS RELATED TO CLIMATE CHANGE AND HISTORIC PRESERVATION

Office of Preservation Initiatives

The text excerpts included in this paper are quoted directly from the documents cited. Click any topic in the list below to jump to that topic.

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Making the Case for Action

Saving Our Past: Planning for Our Future Alaska's State Historic Preservation Plan 2018-2023

Climate change is not just an environmental issue. It is also a social, cultural, and economic issue important to all Alaskans. As a result of this warming, coastal erosion, thawing permafrost, retreating sea ice, record forest fires, and other changes are affecting, and will continue to affect, the lifestyles and livelihoods of Alaskans. (pgs. 77-79)

Indiana's Cultural Resources Management Plan For 2020 to 2026

Like every state, Indiana is vulnerable to a particular mix of natural disasters that can negatively affect cultural resources, and climate change can exacerbate some of these threats. Many historic buildings were constructed in a time when there were less stringent building codes or none at all. Some structures, like bridges, were built to accommodate lighter loads and smaller usage volumes than their more robust counterparts of today. Even belowground resources can be damaged or destroyed by earthquakes, flooding, and erosion. Following is an overview of the main types of natural disasters that happen in Indiana with a few examples of such events and how cultural resources have been impacted in the past... (pg.38)

Over time, the weather events behind many of Indiana's natural disasters – rain storms, flash floods, tornadoes, and the remnants of hurricanes – may become more frequent and more severe. Therefore, climate change poses a very real threat to heritage resources and is something that must be addressed within planning efforts. (pg. 39)

A Map Made of Memory: Kentucky's State Historic Preservation Plan 2017-2021

Scientists overwhelmingly confirm and agree that our planet has gotten warmer in recent decades and will continue to do so, even if mitigation efforts are put in place now to prevent the worst from happening in the future. These changes in our climate will have an impact on historic resources all over the state. Many resources have the potential to be affected by gradual changes, such as the upward change in temperature and humidity that is projected to occur in the decades ahead. But there are also the weather-related impacts brought about by a changing climate – impacts that may be suffered due to more frequent and violent storms, as one example. Flooding is another. Climate change forecasts include increased numbers of precipitation events of longer and more damaging duration...

What this means for Kentucky is that we must prepare to be resilient in the face of these changes. Disaster planning and hazard mitigation for historic resources needs to become more of a focus at both the state and local levels. Because they play such an important role in a community's collective memory, shared identity, and in many cases, the local economy, historic resources deserve special consideration when anticipating disasters and also when planning for disaster responses. (pgs. 23-25)

Climate Change and Historic Resources (Maine)

The future of historic properties is often overlooked in the complex process of planning for the effects of climate change, yet they are also subject to the effects of erosion, high water, intense storms, high winds and wildfire. Much like parks or schools or town buildings, a community's historic properties help create a unique sense of place. Community members, municipal officials, planners, preservationists, scientists and visionaries all need to be part of the discussion of how – and which – historic properties can be protected. Local values, demographics, culture and economics underlay the available and feasible options. (pg. 1)

Michigan Statewide Historic Preservation Plan

A strong case between historic preservation and environmental sustainability—one that grabs the imagination of the public—has not yet been made, although preservationists have been aware of this connection for some time. As the dangers of climate change begin to dominate our politics and we become more ecologically conscious, the time is right to strengthen the connection. Historic preservation is "greener" than new construction because it maximizes the use of existing materials and uses established infrastructure. Retaining a historic building, rather than demolishing it, reduces landfill waste—many historic buildings were built to last for much longer than the 30-year cycle of contemporary buildings. Historic buildings were often constructed with low tech, high performance features such as transoms, high ceilings, recessed windows and large overhangs that addressed their regional climate and site location. When operable, they reduce energy consumption. There should be a renewed concentration on increasing partnerships and finding the right messaging that captures the imagination of the public and powerfully equates historic preservation and environmental sustainability. (pg. 35)

New Jersey Comprehensive Statewide Historic Preservation Plan 2013-2019

New Jersey's historic resources are the physical embodiment of our state's diverse population and rich history. They help tell the stories of our collective past while holding the promise of an economically and environmentally sustainable future. We, in New Jersey, see historic preservation as both a tool for building economically and environmentally sustainable communities and a means of understanding how our past has shaped who we are today and who we will be tomorrow. By recognizing the environmental community as our partners in preserving the State's critical resources, we can work together to protect the

historic resources that are vital to retaining a unique sense of place and maintaining and improving a quality of life that will make the Garden State a desirable place to live and work. (pg. 3)

The Impacts of Inaction-Identifying Threats

Guidance for Disaster Mitigation and Recovery for Historic Properties (Florida)

A lack of preparedness can lead to the damage to or inadvertent loss of historic sites, buildings and structures. Insufficient damage assessments, unsuitable debris management, inappropriate repair and lack of input from preservation professionals in recovery activities are all contributing factors to the adverse effects of disaster recovery activities. (pg. 1)

First You Make a Roux: Ingredients for Preservation Partnerships in Louisiana 2017-2025, A Comprehensive Preservation Plan

Louisiana has long considered the relationship of coastal erosion, due to the combined effects of sea level rise and subsidence, and the loss of much of our culture in the way of archaeological sites, historic cemeteries, and even whole communities. A changing climate will only enhance sea level rise along Louisiana's coast. This situation will present a challenge on an epic scale to historic preservation as more of our coastline, archaeological sites, historical properties, and communities are altered significantly or disappear altogether. While we don't have specific statistics to offer at this time, the Division of HP has seen significant impacts to historic communities having to "adapt" to climate change along areas where protective levees are not present to provide a buffer from high water during torrential rains or hurricanes. In places like Mandeville and Madisonville, many of these communities are required to elevate their properties above the base flood elevation, which can be approximately 8-12 feet or more. This action presents a significant impact on the historic integrity of a house or building and the surrounding historic resources. During this plan period, the SHPO will work to establish a greater relationship with and encourage other stakeholders to approach the Coastal Protection and Restoration Authority (CPRA, a state agency) for information about coastal erosion and climate change, as well as to incorporate discussions about these issues in annual conferences and meetings. Awareness is part of the obstacle that must be overcome. SHPO and other statewide and local organizations must work together and with CPRA appropriately identify areas where historic resources are being impacted most and to increase the chances of remediating further loss of these treasures. (pg. 43)

Weather It Together: Climate Change Planning and Adaptation for Historic Properties and Cultural Sites (Maryland)

Maryland's changing climate complicates planning for natural hazards and disaster response, which have traditionally been tied to predictable cycles of natural events, based on historic trends. Predictions for changes in the climate include: rising sea levels; longer periods of drought; more frequent, intense storms; and the migration/loss of flora and fauna — all of which can detrimentally impact historic places. These climatological changes will exaggerate the effects of natural hazards. For example, sea level rise exacerbates tidal flooding, drought and intense rainfall exacerbates erosion along riverbanks and coastal waterways, and a warmer, higher Chesapeake Bay will allow hurricanes to push storm surge further inland. Migrating pests could pose new threats to historic wood buildings, while migrating flora and fauna can replace native plantings and alter cultural landscapes. (pg. 1)

Massachusetts State Historic Preservation Plan 2018–2022

Coastal erosion due to severe weather storms, rain, wind, and king tides threaten archaeological sites. Dramatic weather events and unusually high tides have and will continue to erode coastal banks, exposing and disturbing archaeological deposits. Massachusetts Historical Commission will need to work with state and federal environmental agencies to explore options for coastal armoring. Some coastal banks, such as the tall cliffs, cannot be armored. Archaeological excavation data recovery may be the only option. Funding these efforts will continue to be challenging. (Sec. 3, pg. 10)

Sea levels are rising due to climate change. With over 60 coastal cities and towns, Massachusetts is especially vulnerable to sea-level rise, coastal erosion, superstorms, and flooding. According to the Greenovate Boston 2014 Climate Action Plan Update, sea level rise is "likely to be greater than the global average because Boston's land is subsiding, or sinking, at about six inches per century and changing ocean currents and other features are affecting the distribution of ocean water." The report further states that Boston has been ranked the eighth most at-risk coastal city in the world in terms of annual economic impact from projected flooding. (Illustration: An exhibit at the Boston Society of Architects building demonstrates the devastating impact of sea-level rise on the city of Boston, including the anticipated daily level of water in their building by 2100.) (Sec. 3, pg. 18)

<u>Climate change will also have grave impacts on areas not adjacent to the coast.</u> With more intense storms predicted, it is likely that inland, low-lying areas will be more likely to flood as a result of climate change. Many historic, industrial cities and villages, sited along rivers for waterpower, are particularly vulnerable to flooding and erosion. With a warming climate, new southern tree species will become more prevalent and the current New England forest will be replaced. Agriculture, as well, is likely to be impacted from additional weather extremes such as flooding or droughts. (Sec. 3, pg. 18)

Nevada Historic Preservation Plan 2020-2028

The warming climate is aggravating drought cycles throughout the Great Basin, with average snow pack declining precipitously. Warmer temperatures shift precipitation from snow – which acts as a reservoir – to rain (even in the winter) and regular "snow droughts" are predicted for much of the West. This shift increases the size and severity of seasonal flooding, as well as instances of acute flash flooding. Water use conflicts between urban and rural interests continue, complicating community development and the agriculture industry. Furthermore, as the two urban centers of Reno and Las Vegas continue to grow reduced green space can result in greater erosion and localized flooding. Higher temperatures and increasing urbanization have also led to increased wildfire risk... These threats endanger Nevada's cultural resources in many ways... Development of renewable energy projects also affects cultural resources, but these initiatives are needed to address climate change...Responses to the first survey showed real concern for environmental changes like flooding and fire that will increasingly impact cultural resources. For example, 67% believe acknowledging and addressing threats - either manmade or natural - to cultural resources should be a priority over the next 8 years and 36% would like to see active engagement from the Nevada Department of Emergency Management to assist Nevada's first responders with cultural resource information and encourage historic preservation strategies in hazard mitigation planning. (Challenges and Opportunities – Environmental Conditions, pgs. 25-26)

New Hampshire's Five-Year Preservation Plan 2021-2025

Something not previously considered in earlier studies, but that is of growing concern, is the threat of sealevel rise induced groundwater rise. It is a complex connection between high tides, storm related flooding and how it causes groundwater to rise, resulting in a Groundwater Rise Zone that is projected to extend up to 2.5 to 3 miles inland in coastal New Hampshire. This is approximately three to four times farther inland than tidal-water inundation (Wake et al. 2019). (pg. 57)

The South Dakota Preservation Plan 2021-2025

Development of energy sources, including wind, oil, gas, and uranium has the potential to affect significant numbers of archaeological and cultural sites over the next five years. . . The recent attention on renewable energy and sustainability will therefore present both challenges and opportunities for historic preservationists in South Dakota. Since historic preservationists have been arguing for the environmental benefits of historic preservation for decades, the recent green movement has given them yet another platform to make the case for preservation. Preservationists will need to make the environmental case for historic preservation through clear and accurate data along with specific case studies of energy efficient

historic buildings. SD SHPO believes unless new protective federal and state statutes are enacted, historic properties and significant landscapes may be threatened by other energy developments. (pgs. 25-27)

Potential Economic Impacts

The 2020-2025 Alabama State Historic Preservation Plan (pg. 28)

Rising insurance costs. Whether or not storms become more intense, coastal homes and infrastructure will flood more often as sea level rises, because storm surges will become higher as well. Rising sea level is likely to increase flood insurance rates, while more frequent storms could increase the deductible for wind damage in homeowner insurance policies.

Costs associated with relocating climate refugees. People may move from vulnerable coastal communities and stress the infrastructure of the communities that receive them.

Loss of water-based tourism and recreation income. As one stakeholder commented, "Water centered tourism is a driving force of many local economies and lowered water levels and flow rates will hurt some local economies severely." Many communities enjoy a recreation-based economy dependent on water that supports a historic downtown district..."

Historic Preservation in North Dakota, 2016-2021: A Statewide Comprehensive Plan (pgs. 41-42) Loss of preservation funding if revenues derived from oil and gas decrease. Oil and gas revenues have provided a large pool of funding available to the state, with 96% of oil and gas tax revenue channeled into a special reserve for one-time projects not included in the regular state budget. With informed direction and effective advocacy, a portion of this revenue is available to fund preservation projects...

Investment in "green energy" and associated growth can also adversely affect historic resources. North Dakota is nationally recognized as having the greatest potential of any state to produce energy through wind power... Industry brings new residents to the state... These people require infrastructure, new or updated, and related businesses, wholesale and retail. This increased economic base provides new avenues of funding for historic preservation. However, all of these endeavors are also potentially destructive to historic resources.

Statewide Historic Preservation Plan, 2018–2023: Community Connections: Planning for Preservation in Pennsylvania (Executive Summary) (pg. 26)

Increased insurance rates mean flood insurance may no longer be affordable to those living in—or identified as living in—a floodplain. Most notable impacts include the increased cost of flood insurance for individual property owners. When aggregated, however, these increased costs associated with living in historically affordable locations will change the dynamics of living and doing business in many communities throughout the country. Much of the northeastern United States has its roots and economies built around towns that are located along waterways. Each of Pennsylvania's major waterways supports dozens of population centers, all of which were established long before the National Flood Insurance Program was enacted.

Resource Damage and Loss

Hawaii State Historic Preservation Plan 2012-2017

Summary of Trends and Issues Related to Historic Preservation. (D)(iii) Current emphasis on alternative energy development (wind, solar, wave, biomass, geothermal) may at times conflict with cultural landscapes or TCPs, creating conflict between energy development and historic preservation. (iv) Climate change is projected to have significant impact on the State. Many historic sites are located along coastlines and could potentially be lost due to rising ocean levels and increasing coastal erosion. Pressure

on coastal lands also pushes development inland, which can also affect existing historic and cultural properties. The challenge will be to capture knowledge and cultural practices associated with a site before that site is lost. (pg.15)

Preserving Our Past, Enriching Our Future: A Vision for Historic Preservation in Idaho 2016-2022

The environmental considerations that come with changes in local climate are of special concern to Idaho's historic, cultural, and archaeological resources. While other areas of the country have to be concerned with rising sea-levels, the greatest area of concern for Idaho is the potential for increased frequency and severity of drought. Much of Idaho is sparsely populated high desert or remote mountain terrain. Increased drought makes those areas especially susceptible to wildfires, which have the real potential to destroy historic and archaeological sites throughout the state. Other environmental impacts to historic resources include: increased interest in weatherization and energy conservation programs, which may affect building design, particularly window retrofits; handicap accessibility requirements and their potential to affect buildings; the abandonment or major upgrades of historic school buildings and other public structures; and reforms in Forest Service and Bureau of Land Management responsibilities that may impact archaeological sites. Increased interest in Leadership in Energy and Environmental Design (LEED) certification, as well as the general "green" movement in energy conservation efforts, while ostensibly compatible with historic preservation principles, may also affect some historic resources; SHPO must work in the coming years to ensure minimal conflict between these principles. (pg. 16)

<u>Broadening Preservation's Reach: Iowa's Comprehensive Statewide Historic Preservation Plan for 2013-2022</u>

Archeological sites are particularly vulnerable to the flood events as many of the recorded archeological sites in Iowa are located within various floodplains. Sometimes a flood helps reveal previously unknown sites, but too often it comes at the cost of destroying the sites. In some instances, flood events have helped preserve archeological sites through burying the sites with various amounts of alluvial depositions. This scenario presents complicated challenges for finding these buried sites; when an archeologist locates one it tends to have greater potential to contain intact deposits and significant undisturbed information. In other cases, the high water velocities of the floods have caused major erosion of landforms, sometimes even significantly altering or completely removing entire landform features along with cultural resources that may be present. (Appendix E: Iowa's Cultural Resources ... reprinted from Resources Within Reach: Iowa's Statewide Historic Preservation Plan, 2007. Threats to Historic Resources) (pg. 92)

Sooner Rather Than Later: Let's Preserve Oklahoma's Past, Oklahoma's Statewide Preservation Plan (January 1, 2020-December 31, 2024)

Renewable energy...presents another challenge. These facilities include ancillary facilities such as access roads, utility lines, support buildings, staging areas for construction, and more. These facilities are located on high spots or ridges where the potential for archeological sites and culturally significant sites are high. The height of wind turbines has a likelihood to impact viewsheds for miles. Wind farms can present a challenge to preserving significant historic and cultural landscapes.

Some wind farms have federal involvement due to the interconnection with existing transmission lines and substations...It is becoming more common, however, for new wind farms to be privately constructed and connected to non-federal transmission lines, therefore not requiring Section 106 compliance. With 3,865 wind turbines in Oklahoma, there is no doubt that they have an impact on historic resources. (pg. 19)

Wyoming's Comprehensive Statewide Historic Preservation Plan 2016–2026

Using CLG funds and working cooperatively with the Shoshone National Forest, the Park County Historic Preservation Commission (PCHPC) has been taking a lead role in debunking the empty landscapes myth that has characterized both public and management thoughts about the Absaroka

Mountains. Focusing on areas that have recently burned in wildland fires, where combustion of surface vegetation opens a temporary window into the history of the region's prehistoric record, PCHPC has been working to provide a glimpse into the past from one of the most little-known regions of our state. On the one hand, results from the 2015 field inventory in portions burned during the 2014 Hardluck Fire in Park County add to the growing body of information that attests to the intensity, complexity, and diversity of prehistoric mountain land use. On the other, our work also documents that even in the most remote areas of our state, heritage resources are at risk, not only from natural processes such as climate change and fire, but also by artifact theft and site looting. Post-fire inventory is a critical component Wyoming historic preservation because it simultaneously demonstrates the richness of the record and the dangers to its protection for future generations. ("Historic Preservation Success Stories: Retelling Stories," Lawrence Todd, Ph.D., Park County Historic Preservation Commission, pgs. 81-82)

Challenges for SHPO Historic Preservation Climate Change Planning

North Carolina Climate Risk Assessment and Resilience Plan – Cultural Resources Section (2020)

Because NCDNCR [North Carolina Department of Natural and Cultural Resources] conducts so much of its critical technical assistance and constituent services work in a collaborative environment, it should be reiterated that many of the decisions that could protect cultural assets that are not under direct state management rest in the hands of local government entities and private property owners. Promulgation of regulations and provision of resources to increase adaptive capacity may also be tied to federal regulations. Some of these rules may need updating to adapt to the realities of ongoing and persistent climate change impacts, such as repeated flooding. Sector development of adaptive capacity where possible will need to continue to be done in coordination with all stakeholders to realize meaningful results...Development pressure, local land use planning rules, jurisdictional divisions, and private property rights will shape adaptation strategies and local and regional solutions. (pg. 5E-15) (The North Carolina SHPO and the State Archivist drafted Chapter 5E, Cultural Resources.)

Wyoming's Comprehensive Statewide Historic Preservation Plan 2016–2026

Climate change presents unprecedented challenges to established planning processes both because the magnitude, nature, and timing of changes are uncertain, and because the complex interaction of changing environmental variables can create cascades of novel and unexpected threats. Reponses to these changes and associated threats that take the human dimensions into account calls for flexibility, innovation, and multi-discipline/multi-agency cooperation and communication... ("Maintaining Linkages with the Past into an Uncertain Future: Climate Change and Historic Preservation Planning," Lawrence Todd, Ph.D., Park County Historic Preservation Commission, pgs.70-73)

Challenges for SHPO Historic Preservation Disaster Response Planning

Georgia's Statewide Historic Preservation Plan 2017-2021

Preservation efforts in addressing disaster preparedness and response are challenging because there is no central repository of information or agency/organization dedicated to developing guidance specifically directed to preservation issues and concerns. Rather, information is available through a number of different sources. These sources include federal agencies, such as the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA), which are responsible for collecting data on climate and weather, and FEMA, which is tasked with providing national planning guidance under the National Response Framework, along with state and local agencies with experience preparing for particular types of severe weather events, such as Florida and Miami-Dade County (FL) for hurricanes. Unfortunately, the dispersed availability of information aggravates the task of compiling and customizing it for use in disaster events due to the limited capacity of State Historic Preservation Offices (SHPOs) and other preservation organizations to dedicate staff to creating plans that

would only be used on relatively rare occasions (as compared to first responders where planning for emergency situations is an active part of their mission). Recognizing these difficulties, however, should not mean disregarding disaster planning because the obstacles are challenging, but rather to initiate efforts with realistic expectations.

In Georgia, there has been slow progress in HPD's attempts to develop a practical and sustainable historic resources preservation disaster response plan. Past attempts have been hindered by targeting efforts on an independent, comprehensive approach that would include disaster response activities beyond the normal capacity of existing staff with expectation that additional resources would be made available for implementation. Recent efforts have concentrated on ensuring HPD affiliation with Georgia's existing disaster response system under the National Response Framework, the Georgia Emergency Operations Plan, Emergency Support Function (ESF) 11 – Agricultural and Natural Resources, by fulfilling the basic responsibilities identified in the Georgia Historic Resources Emergency Plan – Appendix to ESF-11, and incorporating guidance provided by ACHP's Unified Federal Review streamlining initiatives where applicable. (pgs. 34-35)

Historic Preservation in North Dakota, 2016-2021: A Statewide Comprehensive Plan

In order to protect against flooding, buildings and land must be cleared to make way for levee systems and other flood control methods. It is important that these projects be carefully considered in order to minimize the effect on historic resources located in those areas. (pg. 45)

SHPO Support for State Agency Efforts to Proactively Plan for Cultural Resource Management in Climate Action Plans

Draft 2021 California Climate Adaptation Strategy

California is updating the state's Climate Adaptation Strategy this year, as required by the Legislature. The goal is to deliver a 2021 Strategy that outlines the state's key climate resilience priorities, includes specific and measurable steps, and serves as a framework for action across sectors and regions in California...The mission is "To restore, protect and manage the state's natural, historical and cultural resources for current and future generations using creative approaches and solutions based on science, collaboration and respect for all the communities and interests involved."

The previous plan, Safeguarding California Plan: 2018 Update, was developed by 38 agencies across state government as a holistic plan of ongoing actions and recommendations to protect infrastructure, communities, services, and the natural environment from climate change. The plan was intended to serve as a durable guide for state government that both makes its efforts transparent to the public and holds agencies accountable for real progress. One initiative set forth in that document was the establishment of the Cultural Resources Climate Change Task Force. Led by the California Office of Historic Preservation (OHP), with participation of partner state agencies, the Task Force is charged with considering the intersection of cultural resources and climate change to create mitigation and adaptation measures to advance the goals of the Paris Agreement.

Integrating SHPO Planning and Resource Management with State Disaster Management Programs and State Hazard Mitigation Plans

Saving Our Past: Planning for Our Future Alaska's State Historic Preservation Plan 2018-2023

While historic preservation planning allows for the protection of historic properties and cultural resources before they are threatened with demolition or alteration, hazard mitigation planning allows for the protection of life and property from damage caused by natural and man-made hazards. It is important to integrate these two planning processes to ensure the preservation and protection of our historic resources. In 2015, the Alaska SHPO, the Federal Emergency Management Agency (FEMA), and the Alaska

Division of Homeland Security and Emergency Management (DHS&EM) signed a programmatic agreement to address the agencies' Section 106 compliance during disaster response and recovery for federally declared disasters. There is currently no equivalent agreement for state declared disasters and efforts should be made to strengthen the relationship between the Alaska SHPO and the DHS&EM to ensure cultural resources are a part of the ongoing disaster preparedness programs, trainings, exercises, and planning at the state level. (pg. 79)

Shared Stewardship: 2018-2023 Connecticut Statewide Historic Preservation Plan

Integrating historic resource resiliency into state and local government plans is critical to ensure that preservation values are represented in plans for hazard mitigation, conservation and development, and climate preparedness. Planners should consider historic resources in each of the four key steps—prepare, withstand, recover, and adapt—that inform hazard mitigation plans. (pg.28)

Goal #4: Develop a Resiliency Strategy for Historic Resources, Objective 2. Integrate historic preservation into state and local planning initiatives Issue: With few exceptions, hazard resiliency plans do not address historic resources adequately.

Actions: 1. Integrate historic preservation into statewide plans, including Hazard Mitigation Plan, Climate Preparedness Plan, State Response Framework, and Disaster Debris Management Plan. 2. Align historic preservation policies with resiliency goals in State Plan of Conservation and Development updates. 3. Integrate historic preservation into regional and municipal resiliency planning, using data and best practices provided to towns under the SHPO's Hurricane Sandy technical assistance program. (pg.29)

First You Make a Roux: Ingredients for Preservation Partnerships in Louisiana 2017-2025 A Comprehensive Preservation Plan

The SHPO established a strong partnership with the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), a state agency formed after the devastating effects of Hurricane Katrina and Rita to address disaster recovery statewide. This relationship resulted in cultural resources receiving a line item in the Louisiana State Hazard Mitigation Plan for Disaster Preparedness for the first time. This means these resources will be considered as part of all future plans. (Introduction, pg.7)

Massachusetts State Historic Preservation Plan 2018-2022

The Massachusetts Historical Commission and other partner organizations actively participate in COSTEP Massachusetts – Coordinated Statewide Emergency Preparedness – in educating both the cultural resources community and the emergency response community on best practices in preparing for and responding to disasters affecting cultural resources, including historic properties and sites and museum and artifact collections, and archives. COSTEP has forged important links between the Massachusetts cultural resources community, the Federal Emergency Management Agency, and the Massachusetts Emergency Management Agency. It has also fostered wider adoption of disaster plans for historic and cultural properties, and has promoted integration of the needs of historic properties and sites into municipal disaster preparedness and response planning. (pg. 2-20)

North Carolina Climate Risk Assessment and Resilience Plan June 2020

The North Carolina SHPO and the State Archivist drafted Chapter 5E, Cultural Resources.

Examples of Goals, Objectives, and Strategies from Current SHPO Statewide Preservation Plans

<u>Preserving Florida's Heritage: Florida's Comprehensive Historic Preservation Plan 2017-2021</u> Objective 1E: Address long-term threats to historic property

• Incorporate historic preservation into disaster response plans at the state, county, and local levels, including through the expansion of Certified Local Government Programs.

- Digitize and securely back up planning and preservation documents to improve resiliency and facilitate the timely distribution of information in a disaster scenario.
- Establish long term planning strategies for mitigating and adapting to sea level rise, and incorporate them into response plans and comprehensive plans at all planning levels. Survey sea level rise adaptation and mitigation efforts of other coastal states, and adopt relevant strategies. (pg. 29)

Georgia's Statewide Historic Preservation Plan 2017-2021

With expectations and limitations in mind, disaster response planning by SHPOs should include:

- Identifying and understanding risks and vulnerabilities to historic resources in regions and localities;
- Identifying and understanding the functions of federal, state, and local government agencies in disaster response and recovery;
- Identifying partner agencies and organizations and coordination opportunities;
- Compiling available technical guidance for preparing for severe weather events and developing distribution strategies;
- Compiling available technical guidance for disaster recovery planning and developing distribution strategies;
- Identifying SHPO resources that could be of potential assistance in disaster response and recovery and developing strategies to make them readily available when needed;
- Establishing a liaison plan with emergency responding agencies (at both initial response and recovery operations phases);
- Establishing a standby plan for administering disaster recovery assistance if a temporary program is established and funded; and
- Evaluating the effectiveness of the disaster response plan as part of post-action planning activities. (pgs. 34-35)

<u>Broadening Preservation's Reach: Iowa's Comprehensive Statewide Historic Preservation Plan for 2013-2022</u>

Goals and Strategies

- 1. Affirm preservation as a fundamental value of environmental stewardship. Promote prosperity and preservation as closely associated attributes of vibrant communities and the natural environment.
- a. Unite the mutual interests of historical, natural and cultural resource protection to more easily reach common goals.
- b. Foster communication and cooperation among the many organizations working in historic preservation.
- c. Enliven historic places and buildings through use.
- d. Advocate that preservation is integral to sustainable development. (pg. 38)

A Map Made of Memory: Kentucky's State Historic Preservation Plan 2017-2021

Goal 5: Link to Sustainability – Promote preservation activity as a way to achieve economic health; keep culture and identity intact; build community; prevent waste; and prepare for the future.

5. Promote greater awareness of existing cultural resources within flood plains that may be impacted by severe weather associated with climate change. Work with communities to ensure that these resources are well documented at the local and state levels in preparation for disasters, and encourage communities to include their cultural and historic resources when planning for disasters. Encourage the inclusion of cultural resources in statewide disaster and resilience planning. (pg. 41)

First You Make a Roux: Ingredients for Preservation Partnerships in Louisiana 2017-2025 A Comprehensive Preservation Plan

Goal 4. Expand and promote Historic Preservation Services and Programs.

Disaster reference tools should be provided on more agency and advocacy websites. These resources will offer disaster preparedness guidance and protocols for assessing historic and archaeological resources before and after a disaster occurs. Additionally, the websites could offer a clearinghouse of information

on technical resource professionals and other reference materials regarding restoration, rehabilitation, and sustainability. The SHPO will continue our collaboration with the Governor's Office of Homeland Security & Preparedness (GOHSEP) to ensure state owned historic resources are addressed during all disaster preparedness sessions and webinars. (pg.51)

<u>Objective 4h.</u> Ensure that disaster management information is provided to constituents. Strategies:

- 1. Provide reference tools on the Archaeology and Historic Preservation websites that offer disaster preparedness guidance and protocols for assessing historic and archaeological resources before and after a disaster.
- 2. Develop a clearinghouse of information for technical resource professionals and reference materials relative to restoration, rehabilitation, sustainability, etc.
- 3. Continue to work with GOHSEP to ensure historic resources are addressed during all disaster preparedness sessions & webinars. (pg.54)

<u>Goal 5.</u> Continue to build ways to identify and protect historic properties.

A new objective for this plan period is to consider issues of coastal erosion and climate change in relation to archaeological sites and historic structures. To accomplish this objective, relationships may be formed and/or strengthened with universities that study climate change, as well as with the Louisiana Coastal Protection and Restoration Authority and the LSU Ag Center (to understand flood risks) to obtain and share data essential to understanding existing and future effects that may arise as a result of climate change. This information should be incorporated into discussions at annual archaeology and historic preservation conferences, as well as community meetings. The SHPO will continue to promote HFP Grant assistance for HABS and structural assessment documentation of NRHP properties that may be in the path of danger due to coastal erosion and subsidence. (pgs.55-56)

<u>Objective 5c</u>. Consider issues of coastal erosion and climate change in relation to archaeological sites and historic structures and places.

Strategies:

- 1. Establish and strengthen a relationship with the Louisiana Office of Coastal Protection and Restoration Authority relative to impacts to historic resources in coastal areas.
- 2. Promote HPF Grant assistance for HABS and structural assessment documentation of NRHP properties endangered by coastal subsidence and sea level rise.
- 3. Incorporate discussions on climate change and its impacts to historic resources in annual conferences and meetings.
- 4. Review and share climate change information compiled by the US Dept. of Commerce National Oceanic and Atmospheric Administration, as well as the National Flood Insurance Program. (pg. 56)

Heritage for the Future: 2016-2021 Maine State Preservation Plan

<u>C. Goal: Provide additional technical assistance for preservation planning.</u> <u>Strategies:</u>

- 1. Work with a broad spectrum of agencies and partners to identify and document resources that are threatened by climate change.
- 2. Develop additional guidance to assist communities in addressing the State planning goal to protect historic and archaeological resources.
- 3. Proactively consult with state and federal agencies to advocate for historic properties in their planning processes.
- 4. Promote the need for cultural resource disaster planning in collaboration with CERC: MAINE (pg. 15)

Massachusetts State Historic Preservation Plan 2018–2022

Section 2: Major Accomplishments,

Goal 9: Protecting Historic and Archaeological Resources from Detrimental Natural Processes

- 1. Educate organizations regarding the need for disaster planning.
- 2. Participate in the Massachusetts COSTEP Advisory Group to foster a statewide disaster preparedness planning process for cultural resources including historic properties and sites that addresses disaster mitigation, preparedness, response, and recovery.
- 3. Support training to raise the awareness of the emergency management community of the needs of historic properties and sites in disaster situations, and to raise the awareness of stewards of historic properties and sites of the disaster response framework and concerns of the emergency management community.
- 4. Encourage organizations that have stewardship of historic properties and sites to develop formal, written disaster plans and to file copies of their plans with their municipal emergency management director.
- 5. Encourage and support ongoing dialog between organizations that have stewardship of historic properties and sites and their local, municipal emergency management director to develop protocols for procedures and communication in the event of a local disaster.
- 6. Encourage local historical commissions to take a lead role in strengthening relationships between historic property and site stewards, municipal authorities and emergency managers. (pg.20)

Section 4: Goals and Objectives - Climate Change and Disaster Preparedness

Goal 7: Protect Historic Resources from Climate Change, Natural Disasters, and Human-Made Disasters

- 1. Encourage vulnerability modeling, planning, policies, infrastructure, and regulations that will help protect significant historic resources from climate change, natural disasters, and human made disasters.
- 2. Encourage owners of historic and archaeological resources to engage in disaster preparedness planning.
- 3. Promote coordination and communication regarding disaster-planning best practices between cultural-resources stewards and emergency-management agencies. (sec.4, pg. 5)

New Hampshire's Five-Year Preservation Plan 2021-2025

Goal 3: Incorporate and strengthen historic preservation as an element in local, regional, state and federal decision-making, ensuring its role as a critical part of interdisciplinary planning efforts. Objective 4: Incorporate historic preservation concerns into disaster planning and recovery discussions and operations at the local, regional, and state level. Strategies:

- Include cultural resources chapters or sections in municipal hazard mitigation plans
- Include cultural resources sections in state disaster and climate change plans
- Inform emergency managers and first responders about cultural resources
- Develop disaster response plans for cultural resources organizations and institutions
- Make connections between organizations to facilitate integrated preparedness planning and resilience (pg. 70)

In 2019, New Hampshire passed an innovative state law that enables local governments to address governance challenges that may arise when climate impacts cut across jurisdictional boundaries. The law allows for municipal unification and boundary adjustment, and the creation of multi-jurisdictional districts. The law supports local governments in New Hampshire seeking to better coordinate regional responses to sea-level rise impacts and other coastal hazards, and co-operate to share tax revenues and the costs of adaptation strategies. One notable provision of the bill includes the ability for local governments to establish coastal resilience and cultural and historic reserve districts and accompanying funds to

acquire land and relocate cultural and historic structures to higher ground that is less vulnerable to sealevel rise and flooding. (pg. 62)

New Jersey Comprehensive Statewide Historic Preservation Plan 2013-2019

Goal 1: Use historic preservation as a tool to strengthen and revitalize New Jersey's state and local economies in a sustainable manner.

- b. Reach out to Sustainable Jersey and other organizations to increase the integration of preservation into their goals and education process.
- c. Develop an historic preservation component of the Sustainable Jersey program within two years.
- e. Work to strengthen and align the preservation and environmental communities in New Jersey.
- f. Promote the message that preservation is a central part of sustainable growth.
- g. Publicize examples and success stories resulting from the combined efforts of the preservation and green communities.
- i. Assist individuals and organizations in disaster preparedness including the effects of sea level rise. (pg. 29)

Sooner Rather Than Later: Let's Preserve Oklahoma's Past, Oklahoma's Statewide Preservation Plan (January 1, 2020-December 31, 2024)

Goal 4: Incorporate the consideration of archeological and historic resources in public and private sector planning and decision-making processes.

Action item i: Develop and maintain state and local mechanisms for protection of significant archeological and historic resources following natural or man-made disasters. SHPO: Create a phone app for guidance to protect a historic resource following a natural disaster. (pg. 50)

Oregon Historic Preservation Plan 2018–2023

Objective: 8.3 Increase funding for projects that address threats to historic properties and archaeological sites from changing natural environments and disaster. (pg. 26)

Objective: 8.9 Encourage public entities to apply for Oregon Emergency Management's Seismic Rehabilitation Grant program and other funding for disaster preparedness. (pg.26)

Broadening Partnerships

Proactive partnership development by SHPOs with related disciplines and with groups concerned with the environment, environmental justice, affordable housing, economic development, social equity, and global climate initiatives.

In September 2018, a Global Climate Action Summit was held at multiple venues throughout San Francisco, with various additional climate related events held around the city. This international event brought together leaders and people from around the globe and from a variety of public and private sectors to make a united call for climate action. The California SHPO, along with many national and international partners, facilitated an official affiliate session, Climate Heritage Mobilization. This session continued an already building conversation around the intersection of culture, preservation, and climate change. Links to videos embedded in the Climate Heritage Mobilization Program let you hear some of the leading voices worldwide on challenges concerning climate change and cultural heritage resources.

On October 24 and 25, 2019, leaders in the arts, culture, and heritage sectors came together in Edinburgh, Scotland, to launch the Climate Heritage Network. Co-hosted by California State Historic Preservation Officer Julianne Polanco, and Ewan Hyslop of Historic Environment Scotland, the two-day event served as a catalyst for mobilizing the cultural and heritage sectors to help communities address the realities and impacts of climate change. This mutual support network of organizations is committed to aiding their communities in tackling climate change and achieving the ambitions of the Paris Agreement.

The California SHPO is leading the <u>Climate Heritage Network</u>'s Cultural Resources Climate Change Task Force with partners to create mitigation/adaptation measures advancing the goals of the Paris Agreement. Members were recently part of the COP26 Summit and presented affiliate sessions.

In June 2020, Montana SHPO joined the Climate Heritage Network (CHN).

Preserving the historic built environment, protecting cultural resources from damage and loss, and promoting a culture of reuse are already a part what we do at SHPO. Joining CHN recognizes these activities within their context of carbon mitigation and establishing community resiliency in a changing environment.

CHN's Action Plan activities are implemented by volunteer working groups made of the CHN's diverse members. Montana SHPO's work incorporates the **bolded** working group initiatives below:

- 1. Communicating the role of cultural heritage in climate action
- 2. Valuing traditional knowledge
- 3. Making the case for building reuse as a greenhouse gas mitigation pathway
- 4. Mainstreaming culture and heritage into climate planning
- 5. Using culture to promote climate resilient sustainable development
- 6. Supporting climate action by local communities and indigenous peoples

A Map Made of Memory: Kentucky's State Historic Preservation Plan 2017-2021

Partner with other agencies, entities, and organizations to explore where missions overlap, and develop a framework of aligning principles. Explore and map the points where historic preservation intersects with public health objectives (promoting walkability), environmental objectives (capturing embodied energy/recycling buildings for new uses/promoting density of development), financial health (promoting re-development of historic areas for greater economic/tax returns per unit), and social goals (development of affordable housing) to build greater support for historic preservation activity. Collaborate and coordinate educational efforts with new partners in these areas. (pg. 41)

Preserve Maryland II: The Statewide Preservation Plan 2019-2023 Goal 5: Collaborate towards Shared Objectives. Preservation does not exist in a vacuum, and participants in the PreserveMaryland II process pointed out opportunities on the statewide and regional levels for increased collaboration among agencies, organizations and professional disciplines. In particular, we heard: Ensure that state plans and statewide activities are connected and complement each other • Preservation needs to become integrated into other disciplines and practices (Smart Growth, climate adaptation, public health, transportation) • Partnerships among state agencies could be improved with increased in-house capacity for historic preservation (pg. 62)

<u>2013- 2022 North Carolina State Historic Preservation Plan: Legacy – A Gift from the Past for a Better Tomorrow</u>

Develop new partnerships to leverage the HPO's impact

- Cultivate new partnerships with allied entities that have a peripheral interest in historic preservation or may benefit from HPO services or incentives, such as:
 - Landscape Conservation Cooperatives and private land trusts (joint natural, archaeological, and built environment conservation efforts)
 - Emergency management agencies/FEMA to foster greater consideration of historic resources during disaster preparation and recovery efforts (pg. 21)

Public Education/Awareness/Advocacy

Shared Stewardship: 2018-2023 Colorado Statewide Historic Preservation Plan

GOAL #4: Develop a Resiliency Strategy for Historic Resources

Objective 3: Raise awareness about the effects of climate change on historic places

Issue: The risks to historic resources are not widely understood.

Actions: 1. Add resiliency information, resource links, and FAQ sheets to the SHPO's website. 2. Include resiliency as a topic at conferences, symposia, and workshops. 3. Provide additional technical assistance to municipalities and regional councils. 4. Review and synthesize federal policies and technical literature on adaptation as it applies to historic preservation for applicability in Connecticut, and make findings available to local communities. (pg. 28)

Indiana's Cultural Resources Management Plan For 2020 to 2026

Challenges and threats to the state's cultural resources:

• Many people do not yet recognize that climate change poses a real threat to the future of communities and cultural resources in Indiana. (pg. 37)

To learn why the public believes that preservation is important, the survey posed this question with ten different answer options...The lowest-ranked reasons for why preservation is important were because of its environmental benefits and because of its financial benefits. This suggests that most Hoosiers do not yet recognize and/or do not appreciate that preservation can save money, create jobs, enhance the local tax base, conserve energy, protect natural resources, and save farmland and open space. (pgs. 41-42)

Goal 2: Advocate for preservation of community heritage and cultural resources.

Objective A: Promote dialogue between stakeholders and the public about why heritage preservation is essential. 1. Encourage communities to value cultural resources as assets. 2. Emphasize the qualities of historic communities that attract residents and businesses. 3. Illustrate how local preservation efforts fit with resource conservation and environmental values. 4. Work with appropriate agencies to enforce existing laws to protect cultural resources. 5. Promote, support, and participate in events and educational opportunities that focus on cultural resources. 6. Highlight local and community preservation achievements. 7. Teach advocates how to promote the economic and environmental advantages of heritage preservation. 8. Give young people a voice in community planning. (pg. 48)

First You Make a Roux: Ingredients for Preservation Partnerships in Louisiana 2017-2025 A Comprehensive Preservation Plan

The goal is to continue to make much of this information available to state and Congressional legislators as well as the general public, in an attempt to increase their knowledge of and involvement in preserving Louisiana's cultural heritage. (Introduction, pg. 8)

Expand Education and Public Knowledge...through an agreement with the Governor's Office of Homeland Security & Preparedness (GOHSEP)...the DHP focused on disaster recovery by providing a number of workshops targeted homeowners in various regions of the state. (pg. 24)

Preserving the Enchantment: New Mexico State Historic Preservation Plan 2017-2021

Higher temperatures and less frequent moisture have affected the most traditional of New Mexico building materials, adobe. An analysis of the declining moisture content of the impressive earthen-wall ruins at Fort Union National Monument will be presented at the 2019 Leopold Writing Program, cosponsored by the Aldo Leopold Foundation and New Mexico SHPO. The program and its annual writing contest seek to engage a new generation in the ongoing debate about climate change and its effects on our environment and culture. (pg. 24)

Inhabiting our History - The Washington State Historic Preservation Plan 2021–2026

Goal 1. Recognize the protection of cultural resources as key to fostering civic engagement, local identity, and community pride; promote historic preservation as the "preferred alternative" when it comes to implementing programs, policies, and projects that shape how our communities look, thrive, and change.

Historic preservation is a proven, successful approach to managing change in our communities. However, the benefits that preservation brings to community development are often overlooked at the project development stage. This goal charts ways for preservationists to build new or stronger links with partners in growth management planning, climate change, sustainability, economic development, housing, conserving sensitive lands, social equity, disaster preparedness, and community resiliency. Three strategies and associated actions help reach this goal. (pgs. 22-24)